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FLAVONOIDS OF *Bupleurum rotundifolium*

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We have investigated the epigeal part of *Bupleurum rotundifolium* L. (roundleaf thorowax), family *Apiaceae*, gathered in the flowering-fruit-bearing period in May-June, 1980, in the Kara-Kala region (Ai-Dere gorge).

By paper and thin-layer chromatography using color reactions in an ethanolic extract of the epigeal part of *B. rotundifolium* we detected eight triterpene glycosides and six flavonoids. To separate the phenolic fraction from the saponin fraction we used EDE-10P anion-exchange resin (OH form [1]).

The combined flavonoids obtained were deposited on a column of polyamide sorbent and were eluted successively with water and ethanol of various concentrations. To separate the mixture of flavonoids we also used preparative paper chromatography. Six flavonoid compounds were isolated, and these were identified from their chromatographic behavior, physicochemical properties, IR spectra with diagnostic reagents, the products of acid and enzymatic hydrolysis, and comparison with authentic samples.

Substance (I), mp 310-311°C (70% ethanol), λ_{max} 255, 269 sh., 370 nm, was quercetin.

Substance (II), mp 298-300°C (methanol), λ_{max} 253, 268 sh., 370 nm, was isorhamnetin.

Substance (III), mp 240-242°C (methanol), $[\alpha]_D^{20}$ −58° (c 0.5; ethanol), λ_{max} 255, 269 sh., 360 nm, was characterized as isorhamnetin 3-glucoside.

Substance (IV), mp 228-230°C (aqueous ethanol), $[\alpha]^{20}$ −20° (c 0.5; methanol), λ_{max} 255, 265 sh., 362 nm, consisted of quercetin 3-glucoside (isoquercitrin).

Substance (V), mp 180-182°C (methanol), λ_{max} 254, 265 sh., 356 nm, was isorhamnetin 3-rutinoside.

Substance (VI), mp 190-191°C, $[\alpha]_D^{20}$ −30° (c 0.3; methanol), λ_{max} 258, 362 nm, was identified as rutin.

Compounds (I), (II), and (IV-VI) had been isolated previously from *Bupleurum multinerve* DC. collected in Siberia.

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